

CLAIM LISTING

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of eliminating or reducing infection in a biological material, the method comprising removing a binding site contained in the material so that an infectious agent is prevented or inhibited from binding to the biological material.
2. (Original) The method of claim 1, wherein the infection is prion infection, and the infectious agent is prion protein.
3. (Original) The method of claim 1, wherein the biological material is bioprosthetic tissue.
4. (Original) The method of claim 3, wherein the structural integrity of the tissue is maintained.
5. (Original) The method of claim 3, further comprising contacting the bioprosthetic tissue with a preparation comprising a surfactant.
6. (Original) The method of claim 3, further comprising contacting the bioprosthetic tissue with a preparation comprising a surfactant and a denaturing agent.
7. (Original) The method of claim 6, wherein the surfactant is Tween 80.
8. (Original) The method of claim 6, wherein the denaturing agent is a protic solvent.
9. (Original) The method of claim 8, wherein the protic solvent is an alcohol.
10. (Original) The method of claim 9, wherein the alcohol is ethanol or isopropanol.
11. (Original) The method of claim 6, wherein the preparation further comprises a cross linking agent.
12. (Original) The method of claim 11, wherein the cross linking agent is an aldehyde.
13. (Original) The method of claim 12, wherein the aldehyde is formaldehyde or glutaraldehyde.
14. (Original) The method of claim 1, wherein the infectious agent binding site is comprised of phospholipid.
15. (Original) The method of claim 14, wherein the phospholipid is selected from the group consisting of phosphatidylinositol, phosphatidylethanolamine,

gangliotetraosylceramide, phosphatidylserine, phosphatidylcholine, phosphatidic acid, and sphingomyeline.

16. (Original) The method of claim 14, further comprising contacting the tissue with a preparation including a phospholipase.

17. (Original) The method of claim 1, further comprising contacting the bioprosthetic tissue with a preparation comprising formaldehyde, ethanol, and Tween 80.

18. (Original) The method of claim 2, wherein the prion protein further comprises prion-precursor protein.

19. (Original) The method of claim 1, further comprising a terminal sterilization step.

20. (Original) The method of claim 1, further comprising washing the tissue to promote removal of the prion protein.

21. (Original) A method of treating a biological material, the method comprising removing a binding site contained in the material so that an unwanted protein is prevented or inhibited from binding to the biological material.

22. (Original) The method of claim 21, wherein the unwanted protein is selected from the group comprising alkaline phosphatase, Thy-1, and acetylcholinesterase.

23. (Original) A method of eliminating or reducing infection in a biological material, the method comprising removing a binding site comprising binding site a protein or polysaccharide, contained in the material so that an infectious agent is prevented or inhibited from binding to the biological material.

24. (Original) The method of claim 23, wherein the infection is prion infection, and the infectious agent is prion protein.

25. (Original) The method of claim 23, wherein the structural integrity of the tissue is maintained.

26. Cancelled

27. Cancelled

28. (Withdrawn) The method of claim 23, further comprising contacting the bioprosthetic tissue with a preparation comprising a solvent, a surfactant, or a chaotropic agent in an amount effective to extract the binding site from the tissue.

29 - 49. Cancelled

50. (Presently amended) A method of eliminating or reducing calcification in a biological material, the method comprising removing a phospholipid calcium nucleation site

contained in the material by contacting the biological material with a preparation consisting essentially of a surfactant and a denaturing agent so that calcium is prevented or inhibited from binding to the biological material.

51. (Original) The method of claim 50, wherein the biological material is bioprosthetic tissue.

52. (Original) The method of claim 50, wherein the structural integrity of the bioprosthetic tissue is maintained.

53. Cancelled

54. Cancelled

55. (Presently amended) The method of claim [[54]] 50, wherein the surfactant is Tween 80.

56. (Presently amended) The method of claim [[54]] 50, wherein the denaturiing agent is a protic solvent.

57. Cancelled

58. (Original) The method of claim 50, wherein the phospholipid is selected from the group consisting of phosphatidylinositol, phosphatidylethanolamine, gangliotetraosylceramide, phosphatidylserine, phosphatidylcholine, phosphatidic acid, and sphingomyelin.

59. (Presently amended) The method of claim 53 further comprising contacting the tissue with a preparation including A method of eliminating or reducing calcification in a biological material, the method comprising removing a phospholipid calcium nucleation site contained in the material by contacting the biological material with a preparation consisting essentially of a surfactant, a denaturing agent and a phospholipase so that calcium is prevented or inhibited from binding to the biological material.

60. Cancelled

61. (New) A method for determining the amount of post implant calcification that will occur in a fixed bioprosthetic tissue, comprising:

assaying the total amount of phospholipid contained in a tissue; and

comparing the amount of phospholipid assayed with a standard curve correlating amounts of phospholipid with amounts of post implant calcification for the bioprosthetic tissue, wherein the amount of phospholipid content in the bioprosthetic tissue is directly proportional to the amount of post implant calcification.

62. (New) The method of claim 61, wherein said standard curve is obtained by

the method comprising:

providing a first portion of at least a first tissue and a second tissue;

separately extracting the phospholipids from said first portions of said first and second tissues;

quantitating the total amount of phospholipids extracted from said first and second tissues;

implanting a second portion of said at least first and second tissues into a subject for a preselected period of time;

retrieving said implanted first and second tissues;

separately analyzing said first and second retrieved tissues for calcium content; and

statistically correlating the phospholipid content with the amount of calcification for said at least first and second tissues.